Organic Dairy Production

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Factsheet

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Organic dairy production is a system of farm design and management practices for producing milk, yogurt, cheese, cream and other dairy products without the use of pesticides, synthetic fertilizers or antibiotics. For some producers, organic dairy production can be a good fit. There are many factors to consider before making the transition, including current and future milk demand, standards, certification requirements, production costs and lifestyle goals.

ORGANIC DAIRY CERTIFICATION

For dairy products to be sold as organic, producers must be certified as organic. In 2009, Dairy Farmers of Ontario (DFO) reported that there were 75 organic producers supplying approximately 24 million L of milk. Basic certification requirements include:

- managing crop and pasture land without the use of synthetic fertilizers, genetically engineered (modified) organisms (GMOs), fungicides, herbicides or insecticides for 3 consecutive years
- maintaining accurate records for production management, including machinery usage and cleaning, rented land and storage
- providing a comprehensive history of all land to be certified
- feeding 100% organic rations to cows and replacement heifers (with certain exceptions, such as minerals and essential ingredients that cannot be sourced as organic)
- avoiding the use of antibiotics or synthetic hormones — under the supervision of a veterinarian, antibiotic use is permitted twice a year per cow but the withdrawal period must be extended; vaccination, vitamins and electrolytes are allowed.
- providing access to certified organic grazing land throughout the growing season, weather permitting. Pasture must provide at least 30% of the total dry matter intake. The animal should have access to the outside throughout the year.

Before transitioning to organic production, contact an accredited certifying body and obtain the current certification requirements.

The period of time it takes to switch a dairy operation from conventional dairy production to organic dairy production is called the transition time. How long this takes depends on factors such as cow herd size, the size of the land base and previous farming practices. Complete organic certification generally requires a mandatory year of transition for the herd and pasture — the farm is operated as an organic dairy operation for 1 full year before it is certified. During the transition time, the cows are kept according to organic production standards, but the dairy products produced from this herd cannot be marketed as organic until the farm receives certification. In addition, the hay, pasture and other fields for feed crops must have been managed as organic for a minimum of 3 years on top of the mandatory 1 year of transition time.

The lead agency for organic standards is the Canadian Food Inspection Agency (CFIA). A Canadian Organic Office has been established, and the CFIA oversees the production of organic foods across Canada. Canadian standards for organic agriculture have been developed by the Canadian General Standards Board (CGSB). The standards provide requirements for organic food producers and provide the basis for certification. Dairy Farmers of Ontario also has an organic milk marketing policy.

Research the specific requirements of both the provincial marketing board and the Canadian Food Inspection Agency when considering making the transition to organic milk production.

Ministry of Agriculture, Food and Rural Affairs

Ontario

Figure 1. Throughout the growing season, organic dairy cows must graze outdoors.

COMMON ORGANIC DAIRY PRODUCTION REQUIREMENTS

Efficient organic farming requires a different production strategy that includes pasture, a high forage diet and a limited role for grains and others concentrates. Most purchased feeds must be certified organic. For this reason, managing an organic operation can require more labour and a certain level of commitment to the operation and to organic principles.

Pasture

In an organic dairy operation, all cows should have daily free access to pasture, paddocks or runways. Throughout the growing season, cows must be able to graze outdoors. At least 30% of their dry matter requirement must come from pasture. If raw or composted manure is applied to the pasture, the cows are not permitted to graze on the land until the manure breaks down biologically. Some producers compost manure before field application as a way to speed up this process.

Housing Conditions

Housing for cows must provide minimal stress in a facility that meets their normal socialization, feeding and living behaviours. The housing system should consist of a comfortably equipped stall with soft floors, sufficient space, adequate floor traction, proper ventilation and access to the outdoors. Dairy housing must also be clean, dry and provide protection from elements. Tie stall barns are allowed but the animals must go outdoors at least twice a week during the winter months.

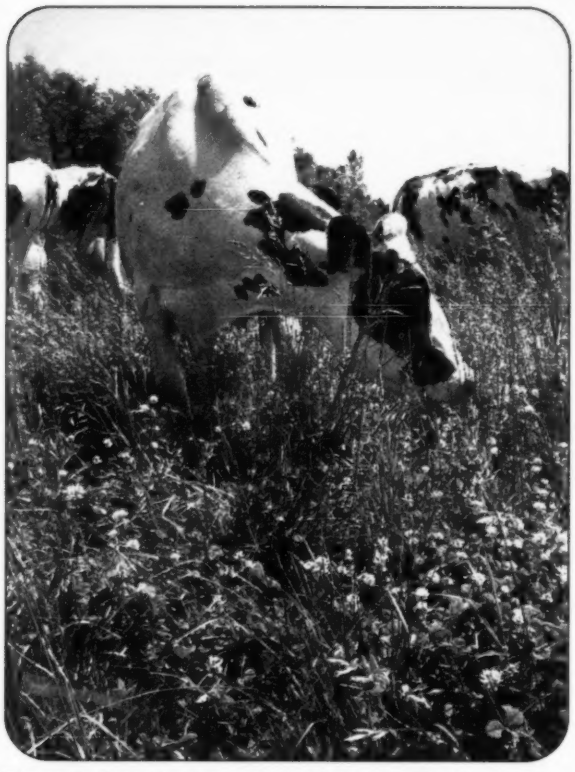

Figure 2. Organic cows eat a balanced organic feed ration.

Feed and Water

There are special requirements for feed and water for organic dairy cows. To satisfy their nutritional requirements and ruminant behaviour, they eat a balanced organic feed ration free of any antibiotics, hormones, chemically extracted or genetically engineered components, or substances that are synthetically preserved or coloured. The feed consists of substances that are necessary and essential for maintaining the cows' health, including large amounts of high-quality roughage. All ingredients used are certified as organic and approved for use by an accredited certifying body.

Health Care

As with conventional milk production, organic dairy cows receive proper health care to maintain animal health and prevent disease. Hormones for reproductive difficulties are prohibited, and cows with continued mastitis problems are culled from the organic herd.

Table 1. Sample Feed Cost per Cow per Day

Feed	Organic	Conventional	Difference
Haylage	$1.38	$1.38	$0
Hay	$0.14	$0.13	$0.01
Barley	$0.30	$0.18	$0.12
Feed wheat	$0.64	$0.40	$0.24
Corn	$2.27	$1.12	$1.15
Mineral premix	$0.36	$0.30	$0.06
Total	**$5.09**	**$3.51**	**$1.58**

Source: Organic Meadow Coop, 2008

Should preventive health measures fail and cows become sick or injured, chemical treatments are allowed, subject to the standards and approval of a certifying body. Antibiotics and other chemical therapies can be used for treatment, but the milk from the treated cows will require a minimum withdrawal period equivalent to double the label requirement or 14 days, whichever is longer, before the milk from the treated cows can be considered organic again.

As in conventional dairy, the welfare of the animal always comes first. Organic standards forbid the withholding of any type of treatment, even if they are not acceptable under organic production. Animals that must be treated with products that are not approved for organic production must be removed from the organic herd.

ORGANIC DAIRY PRODUCTION COSTS

The cost of transition depends on numerous factors, including the number of cows, feed costs and expenses. Once certified, an organic farm may be inspected annually to ensure that it is functioning organically.

Table 1 provides an example of the feed cost difference between organic and conventional production.

Table 2 lists additional yearly expenses that can be expected for an average-size operation of 58 cows. During the transition period, the cost of production will increase without increased revenues until the farm becomes fully certified. Once the farm is certified, organic milk may only be a part of the total milk marketed by the farm, depending on the amount sold as organic to the consumer by Dairy Farmers of Ontario (DFO).

Higher organic dairy production costs are typically recouped through increased revenue.

Table 2. Additional Expenses for an Organic Operation

Expense	Cost
Annual certification fee	± $1000
Additional paperwork ±50 hr/yr	± $750
Additional barn work ± 25 hr/yr	± $375
Total per cow per day	**$0.10**

Source: Organic Meadow Coop, 2008

SUMMARY

Changing to organic dairy production requires commitment. When deciding whether to switch to organic dairy production, be aware of what's involved. Take the time to thoroughly research and plan the transition. The changes required will vary from farm to farm. Develop a detailed plan that outlines the necessary steps for your operation.

For more information

Additional information is available on the OMAFRA website at www.ontario.ca/organic.

OMAFRA Factsheets:
Starting an Organic Farm, Order No. 09-073
Transition to Organic Crop Production, Order No. 10-001

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Canadian General Standards Boards. Permitted Substances List, 2006, amended 2008, 2009. www.tpsgc-pwgsc.gc.ca/cgsb/on_the_net/organic/index-e.html

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